The Use of Politeness Strategies in the Analysis and Discussion Sections of English Research Articles

Ebenezer Agbaglo
Department of English, University of Cape Coast (UCC), Cape Coast, Ghana

Abstract
This study explores the use of politeness devices in the Analysis and Discussion sections of research articles produced by English Language Teachers in the University of Cape Coast. The corpus comprises 20 Analysis and Discussion sections of the research articles. Using Brown and Levinson (1978, 1987) and Myers’ (1989) models for the analysis, it was found that these lecturers use politeness strategies in their research articles. It also became clear from the analysis that these lecturers favor the use of negative politeness strategies as compared to the positive politeness strategies.

Keywords: research articles, politeness strategies, academic discourse, Analysis and Discussion sections

1. Introduction
With the introduction of the politeness theory by Goffman’s (1955) ‘On Face Work’, with its further development through classical works such as Lakoff (1973) and Leech (1983) to Brown & Levinson (1987), who conducted extensive studies on politeness, scholars have shown interest in the study of linguistic politeness. Generally, most of these studies likened linguistic politeness to social behavior used to avoid conflict in communication and rather limited their focus of study on verbal communication in face-to-face interaction (Pilegaard, 1997). However, with the advent of Myers’s (1989) ‘The Pragmatics of Politeness in Scientific Articles’ which applied politeness theory to research articles written by molecular geneticists, studies in politeness have now been extended beyond verbal communication to include written communication. In his study, Myers (1989) argued that politeness strategies can be used in written communication as a way of ensuring smooth communication between writers and readers. Before Myers’s (1989) study, Swales (1995) had established that, though written discourse may appear monologic, the relationship between writers and readers is in the form of dialogue. Considering written discourse as a social dialogue between writers and readers, the relationship that exists between writers and readers can best be explained using the concept of metadiscourse (Hyland & Tse, 2004). In this regard, written texts are viewed as a social interaction in which participants construct interpersonal relationships. In other words, metadiscourse regards writing as a social interaction in which language is used to construct and negotiate social interactions (Hyland, 2005). This is because it helps writers to facilitate communication and build a relationship with readers (Hyland & Tse, 2004). Once writing is considered a social interaction, the relationship that exists between writers and readers can best be considered as a dialogue in which the possibility of threatening face cannot be ruled out. In effect, written discourse reflects writer-reader relations, just like any other human interaction where face is at stake. Being aware of this relationship, writers make some linguistic choices that reflect this relationship. These devices include pronouns, directives, questions, appeal to shared knowledge and personal asides (Hyland, 2002). Others include hedges, boosters, attitude markers and self-mentions (Hyland & Tse, 2005). Thus, linguistic behaviour of writers which mirrors the awareness of their own face and those of readers can be examined using politeness theory.

Following Meyers (1989), there has been a revived interest in the study of politeness strategies in written texts such as business letters and scientific texts (Maier, 1992; Pilegaard, 1997; Getkham, 2016). Scientific articles have been the subject of politeness studies by researchers who looked at it from different perspectives. A good number of researchers have explored the use of hedges as a politeness device in research articles. Vassileva (2001), for instance, explored the use of hedges in English and Bulgarian research articles. It was found that both English researchers and their Bulgarian counterparts employ hedges in their research articles and that they all use the same linguistic means of expressing hedging. The finding also exposed some significant differences in the frequencies of use of the various linguistic devices used by the two groups of writers. Similarly, Falahati (2007) investigated the cross-disciplinary variations in the use of hedges in medicine, chemistry and psychology. He, therefore, analyzed a corpus of 25,983 words from articles in the aforementioned disciplines. His findings revealed that there are differences among the three disciplines as regards the frequency of occurrence of the kinds of hedges. Like some previous studies (e.g. Burrough-Boenisch, 2005), this research also revealed that hedges normally occur in the discussion section of research articles.

Aside the use of hedges, the use of positive and negative politeness strategies in research articles has also been investigated. In fact, Myers’ (1989) study which was the first of this kind, explored the use of positive and negative politeness strategies in research articles. Myers (1989), using research articles from molecular genetics, investigated how linguistic politeness manifests itself in research articles. His findings indicated that, in writing the articles, researchers make use of FTAs in making their claims and rejecting the claims of others. The
researchers, therefore, use both positive and negative politeness strategies in minimizing the effects of the FTAs. The findings also revealed that pronouns and certainty modifiers are used as positive politeness strategies whilst discourse devices, including hedges are used as negative politeness strategies.

Using Brown and Levinson’s (1987) theory, Getkham (2014) also investigated how politeness strategies are used in research papers produced by Thai graduate students. His data comprised 32 discussion sections of research papers produced by graduate students. It was found that graduate students rarely used

Other interesting results include those of Gil-Salom and Soler-Monreal’s (2009) and Martinez (2001). Secondly, while most of the previous studies focused on the sciences (e.g. Falahati, 2007; Myers, 1989), only a few focused on the humanities (e.g. English and Bulgarian: Vassileva, 2001). The discipline in the present study (English) is yet to be considered in mono-disciplinary studies on politeness.

The corpora consisted of 46 discussion sections of research articles from the fields of computing, telecommunications, nanotechnology and robotics. The study revealed that, when presenting ideas that the writers believe to be a common knowledge to other researchers, writers of academic articles make strategic use of certainty adjectives in an effort to display solidarity with their readers. Moreover, Martinez (2001) contended that impersonal constructions most frequently occurred in the Results and Discussion sections of research articles. Also, Getkham (2014) investigated the use of politeness strategies in research papers written by Thai graduate students. His corpus comprised 32 discussion sections of such research papers. It was found that those graduate students rarely used politeness strategies in their research papers. The findings also indicated that negative politeness strategies were used more than positive politeness strategies.

From the literature reviewed above, it becomes clear that, firstly, most of the studies on politeness strategies in research articles focused on some identifiable linguistic politeness strategies such as hedges (e.g. Falahati, 2007) and impersonal constructions (e.g. Martinez, 2001). Secondly, while most of the previous studies focused on the sciences (e.g. Falahati, 2007; Myers, 1989), only a few focused on the humanities (e.g. English and Bulgarian: Vassileva, 2001). The discipline in the present study (English) is yet to be considered in mono-disciplinary studies on politeness. Moreover, as far I know, all the studies on politeness strategies in research articles appear to be conducted outside Sub-Sahara Africa. Consequently, it needs to be seen how the findings of the present study conducted in Ghana (Africa) agrees or disagrees from the findings of the studies already discussed in the literature review. The present study, therefore, aims to contribute information to the existing research on the use of politeness strategies in research articles by analyzing articles written by lecturers in the department of English of University of Cape Coast. Principally, the research aims at answering two research questions: What kinds of politeness strategies are used by lecturers of the Department of English of the University of Cape Coast in the Analysis and Discussion section of their research articles? and What is the frequency of occurrence of the various politeness strategies found in the Analysis and Discussion section of the research articles?

2. Theoretical model

2.1 Brown and Levinson’s (1987) Politeness Theory

The most popular politeness theory is the one propounded by Brown and Levinson. This theory is heavily influenced by Goffman’s (1967) notion of face. Goffman (1967) sees face as a constituent of social interaction. Face, according to Goffman (1967, p.5), is “the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact”. Here, Goffman was suggesting that face is not a permanent image imposed on people. Face is, rather, formed during a particular communicative event. Accordingly, in any communicative event, face emerges as a result of face work. The action an individual takes to make whatever he is doing consistent with face is referred to as face work (Goffman, 1967). In other words, in an interaction, face must be in harmony with face works. Brown and Levinson, improving upon Goffman’s concept of face, proposed their politeness theory, in which face theory was divided into positive face and negative face.

In the opinion of Brown and Levinson (1987), every individual has two face needs which are the positive face and the negative face. According to them, while positive face is the wish to “be desirable to at least some others”, negative face is the wish to have one’s “actions unimpeded by others” (p. 62). Brown and Levinson (1987) maintained that face is “something that is emotionally invested, and that can be lost, maintained or enhanced, and must be constantly attended to in interaction” (p. 66).

Brown and Levinson (1987) furthered their argument by saying that certain kinds of acts threaten face. They proposed that threatening the face of an individual has an impact on the maintenance of the relationships. Despite the fact that we all are interested in maintaining the face of others, we perform some acts which are not polite and threaten the face of others. Among the acts that threaten the face of others may be mentioned orders, requests, suggestions, threats, warnings and so forth, which pose a threat to the addressees’ negative face, or disapproval, disagreement, criticism, which may threaten their positive face.

As already mentioned, since we all are interested in maintaining the face of others, under normal circumstances, people try to avoid Face threatening Acts (FTA). However, when it becomes impossible to avoid the FTA, then the only thing people can do is to minimize the threat caused. They further propose that the degree
of threat can be evaluated according to three culturally sensitive social variables: social distance (D) between interlocutors, relative power (P) of the participants and absolute ranking (R) of the impositions carried in the act in a particular culture. In addition to the three variables, the seriousness of an FTA is also determined by the participants in interactions. In any given situation, participants then select strategies (see Figure 1) appropriate to its needs. The greater the threat of an act, the more a polite strategy is required. With this rationale, Brown and Levinson propose five strategic choices for speakers:

Figure 1. Possible strategies for doing FTAs (Brown and Levinson, 1987, p.69)

[The numbers 1-5 refer to strategies to minimize threats from FTAs]

The first strategy is on record politeness strategy. Here the FTA is done directly, unambiguously and concisely without any redressive action. Normally, this strategy is employed among people who are very close to each other or know each other very well. It can also be used in a situation of urgency. In such circumstances, maintaining face is not the main goal of the conversation. For instance, someone can shout “watch out” when he or she realizes that someone is in danger. In this scenario, it is very unlikely that the person who shouts “watch out” will be considered impolite, the reason being that the urgency of the situation is considered more important.

According to Brown and Levinson, the second and third strategies are used in connection with positive and negative faces respectively. These strategies make use of redressive actions in order to mitigate the face threatening acts that may possibly threaten the faces of the interlocutors. People use these strategies to cater for their own face needs and the face needs of others so as to maintain a good relationship between themselves and others.

Sometimes, speakers realize that when the FTA is done, the intensity of face lost will be so great. In such situations, speakers use off record strategies to convey their message ambiguously, leaving the hearer to interpret the message in his own way. Off-record politeness relies upon implication. There exist fifteen off-record politeness strategies and they are: give hints, give association rules, presuppose, understate, overstate, use tautologies, use contradictions, be ironic, use metaphors, use rhetorical questions, be ambiguous, be vague, over-generalize, displace hearer, be incomplete, use ellipsis (Bousfield, 2008). Though off-record politeness strategies are considered very polite, Brown and Levinson admit that in practice, some of the off-record strategies are actually on record strategies.

The last strategy (don’t do the FTA) is considered to be the most polite among the politeness strategies. According to Brown and Levinson (1987), a wise person would evade the FTA or do his very best to mitigate the threat. This strategy is often used when the speaker realizes that the magnitude of the FTA could be too great and decides to do nothing, so as to avoid face loss.

2.2 Politeness Theory and Written Discourse (Myers, 1989)

Whilst the politeness theory propounded by Brown & Levinson (1987) was originally used to analyze spoken data, it has been successfully applied to written discourse, in general, and written academic discourse, in particular (e.g. Myers, 1989; Pilegaard, 1997; Getkham, 2016). In written academic discourse, politeness is seen in the way writers engage readers in the activity and how they offer, promise or give reasons in order to soften the blow of the FTA.

2.2.1 Positive politeness strategies (Expressing solidarity with the reader)

Positive politeness strategies are the strategies used to emphasize solidarity, common grounds or agreement. When writers are making claims or suggestions in research articles, they employ a variety of positive politeness strategies to enable them gain approval from readers. The strategies used here include Claiming common grounds and Showing that the writer and readers are cooperators (Brown & Levinson 1978). Two sub-strategies (claiming common views, attitudes, and opinions and creating rapport) find themselves under the strategy Claiming common grounds.

According to Myers (1989), in claiming common views, attitudes and opinions, writers make a good
use of modifiers such as adjectives. Adjectives that are normally used by writers in this regard include certainty adjectives such as clear, certain, sure, undoubted and definite. Below is an illustrative example from Getkham (2013, p.130):

1. Another **obvious** limitation is the use of strong functional forms used for the demand and cost functions.

In the above example, the writer uses the certainty adjective obvious to claim common grounds with readers another way by which writers claim common views, attitudes and opinions with readers and engage them in the work is through the use of alternative and speculative expressions (Myers, 1989; Getkham, 2013). By using such alternative and speculative expressions, writers assume that their audience have a shared knowledge of the claims the writers are making, as illustrated in the example below.

2. To mimic the strategy followed by such literature, estimation is also performed using ML under the **assumption** that the errors defined by (10) and (11) are jointly normally distributed. (Getkham, 2013, p. 130)

The writer of the above example claims common ground with the audience by using the assumptive expression **assumption**.

In addition to the first sub-strategy, writers also use the second sub-strategy **Creating rapport** to create common grounds with readers (Getkham, 2016). In creating rapport with the readers, writers normally use emotional expressions, rhetorical questions and imperatives to show solidarity with the readers. The following are some illustrative examples from Getkham (2013, p. 131):

3. **Interestingly**, learners with low self-regulation skills did not benefit significantly by the partially learner-generated mapping, contrary to the intention of the treatment design: the original assumption was that partially learner-generated concept mapping would help learners with low self-regulation more because it combines the advantages of a midlevel of generativity and a pre-developed structure of an expert’s schema that reduces learners’ cognitive overload.

4. To see how wide this uniform distribution is, **note that** for the distribution of family net worth for all U.S. farm households in 2004, the ratio of the 95% quartile (= $2.36 million) to the 10% quantile (= $150 thousand) is only 15.7.

5. **What about the use of historical experience, knowledge of institutions, and professional judgment as part of the process that produces Applied Economics?** How about including the use of “economic intuition” in the mix? I would argue that all of these aspects of knowledge and approaches to analysis belong in the realm of Applied Economics.

In the examples above, an emotional expression, an imperative and a rhetorical question are respectively used by the writers to show solidarity. Whilst the writer of example (3) used the emotional expression interestingly, the writer of example (4) used the imperative note that. The writer of example (5), on the other hand, makes use of the rhetorical question What about the use of historical experience, knowledge of institutions, and professional judgment as part of the process that produces Applied Economics? to achieve the same aim.

By using some politeness devices, writers also indicate that they cooperate with readers. In showing that the writer and the readers are cooperators, writers make use of the inclusive pronoun we and its derivatives (Myers, 1989). In using this pronoun, the writer considers readers as colleagues or fellow researchers (Harwood, 2005; Li and Gi, 2009) and writers to reduce the gap between they themselves and readers, thereby bringing readers into the text (Hyland, 2002). The following example from Gil-Salom and Soler-Monreal (2009, p.180) illustrates this point.

6. **We** assume that the two operands are the same and both are pyramids. Each has n number of vertices, 2n 22 number of edges, and n number of faces.

In the above example, it is clear how the writer used we to create rapport between himself and the readers.

2.2.2 Negative Politeness Strategies (Mitigating imposition when making claims)

According to Myers (1989) most of the conventional features of research articles double as negative politeness strategies which are used to assure readers that writers do not want to impose on their freedom of action. These strategies include hedges, and impersonal constructions. Getkham (2013) groups these strategies into three main sub-strategies: Being tentative by hedging, Showing that you don’t want to impose and Attributing all responsibility by personalization.

In order to avoid coercing readers, most writers mitigate their FTAs through hedging. To this end, writers employ hedges such as modals, modifiers (e.g. probably, possibly, probable, possible, likely) and tentative verbs. According to Myers (1989), these devices normally occur in Discussion sections of research articles, the reason being that this section contains tentative propositions for the research findings. An example is given below:

7. Another **possible** explanation for students’ perceived interest in grammar teaching might be an experienced disconnect between teaching and testing. (Getkham, 2013, p.131)

In the example above, the writer makes use of the modifier **possible** and the modal auxiliary verb **might** to avoid imposing his views on readers.
To indicate that they do not want to impose their views on readers, writers dissociate themselves from the statement by the use of a variety of linguistic devices. This strategy embraces three sub-strategies: the use of impersonal construction 1, the use of impersonal construction 2, and the use of introductory phrases. In the first sub-strategy (impersonal construction 1), writers use impersonal constructions such as these observations suggest, these results imply, this leads to the proposal, to introduce their ideas. Writers who use the second sub-strategy make use of agentless passives to introduce their ideas. The introductory phrases used in the third sub-category include phrases such as it seems, it is interesting to, et cetera (Getkham, 2013). This is illustrated below:

8. **These results suggest that subsequent non basic job growth** is negatively and significantly related to the 1990 mining share, but the other two basic or export sector employment shares are statistically.

9. **Unless games are designed specifically as curriculum resources**, or else considerable support is provided for post-play reflection, relating experiences of play to formal education is problematic.

10. From the literature, it is evident that assessment can be used as a means of channeling students’ energies as it requires students to focus their efforts towards successful completion of tasks. (Getkham, 2013, p.132)

The above examples show how the strategy showing that you don’t want to impose is used. In example (8), (9) and (10), impersonal construction 1, impersonal construction 2 (passive voice without agent) and the introductory phrase respectively are used.

Oftentimes, writers also assume all responsibility by showing their personal attachment to their claims. In this regard, writers use personal subjects followed by performative verbs. Performative verbs are verbs that explicitly convey the kind of speech act being performed. Such verbs include believe, deny, and declare. The example below illustrates this point (Getkham, 2013, p.132).

11. **We believe** that this inconsistency that marks all textbooks to some extent is not due to ignorance of or in attention to sociolinguistic concerns (prefaces demonstrated awareness of these aspects and several of the textbook authors are renowned sociolinguists).

When writers assume personal responsibility, they present the claims from their own point of views, giving the acceptability of other possible opinions.

3. **Methodology**

3.1 **Research Site**

The study focused on the University of Cape Coast, particularly the Department of English. Established in 1962 in the coastal town of Cape Coast, the University of Cape Coast was to train teachers for Ghana’s educational institutions. For this reason, the University coordinates the activities of all teacher training institutions in Ghana. Over the years, the university has incorporated courses and programmes relating to the sciences and humanities into its curriculum. Currently, like the other public universities in Ghana, the university offers both the traditional residential university education as well as distance education (Afful & Akoto, 2010).

Three reasons accounted for the choice of the University of Cape Coast, in general, and the Department of English, in particular, as my research site. The first reason is the researcher’s affiliation to the university, in general, and the department, in particular. Being a student of the University, the researcher found it relatively easier to have access to the data. The second reason has to do with proximity. In this regard, conducting the research in this institution saved time and the limited resources available to the researcher since he did not need to be travelling all over the country to collect data. Finally, this site was chosen because there have not been any studies on politeness strategies in written academic discourse in this research site before. Using this research site, therefore, has helped extend studies in politeness in terms of geography.

3.2 **The corpus**

The data comprises 20 Analysis and Discussion sections of research articles written by lecturers in the department of English of the University of Cape Coast during the period 2010-2015. This time frame is chosen because I believe that the research articles written during this period were enough to reflect the entirety of research articles written by lecturers in the department. The data for the research was collected from the Department of English Library. Being a student of English, the researcher did not need an introductory letter in order to have access to the data. Therefore, the researcher verbally informed the librarian about the intention of collecting the data in the library. A period of one week (Friday, 1st April - Friday, 8th April, 2016) was used in collecting the data for the research. The research articles were collected manually after which the Analysis and Discussion sections were photocopied. Thereafter, the research articles were returned to the library. In all, 50 research articles were collected, and to ensure an unbiased representation of the corpus, using the Simple Random Sampling (SRS) procedure, 20 research articles were selected for the purpose of the research. This procedure was used since it ensures that each member of the population has an equal chance of being selected so as to enable us have valid and reliable findings of any given research (Fraenkel & Wallen, 2000).
3.3 Data Analysis Procedure

The analysis of the data was strictly guided by the research questions. The content qualitative research procedure was used to analyze the data, teasing out the various linguistic items used to express politeness in the data. At the heart of content qualitative research procedure is coding. In conducting the research, open coding was used in putting together distinct concepts and categories in the data, which will form the basic units of analysis. In extracting the various politeness strategies, a careful reading was done through the data and all sentences, clauses and phrases that contained any politeness strategy was selected. Anytime a politeness strategy was found, the sentence in which it occurred was written on a separate sheet with the politeness device highlighted. In cases where a sentence contained more than one strategy, that particular sentence was written on a separate sheet twice or as many times as those politeness strategies occurred in the sentence. After this, the researcher employed the help of some Research Assistants who served as inter-raters. With the help of the inter-raters, the linguistic items identified in the data were carefully analyzed and classified into positive and negative politeness strategies. The strategies were further divided into sub-strategies.

In addition to the qualitative method of analysis, researcher also used the descriptive statistics as a quantitative method of data analysis. This approach enables the researcher to infer hidden trends that lie within the data (Fraenkel & Wallen, 2000). Using this procedure, the researcher was able to provide a graphical presentation of the percentages as well as the frequency of occurrence of the various politeness strategies identified in the data

Further, the analysis of the data was underpinned by Brown and Levinson's (1978, 1987) and Myers' (1989) models of politeness since they appear to be the most elaborated and influential models (Fraser, 1990).

4. Analysis and Discussion

4.1 Positive Politeness Strategies

The data analyzed indicates that the various positive politeness strategies proposed by Brown and Levinson (1987) and Myers (1989) were used in varying proportions. The devices used include certainty adjectives, alternative or speculative expressions, imperatives, emotional expressions, and the inclusive pronoun we and its related cases. The frequency distributions of these devices, however, differ. The paragraphs below discuss how the positive politeness strategies “claiming common grounds” and “showing that writer and reader are cooperators” are used in the data analyzed.

Solidarity is achieved when writers claim common grounds with other researchers and readers (Gil-Salom & Soler-Monreal, 2009). Writers claim common grounds with readers using two sub-strategies: “claiming common views, attitudes and opinions” and “creating rapport”. As regards “claiming common views, attitudes and opinions”, the analysis indicates that researchers mostly use certainty adjectives, alternative expressions and imperatives in creating common grounds. Certainty adjectives used appeal to shared background knowledge in the claims made by the researchers. The communicative purpose of these certainty adjectives, according to Gil-Salom and Soler-Monreal (2009), is to make readers recognize something as generally accepted by the scientific community. The certainty adjectives used include clear, obvious, apparent and certain. The following sentences indicate how these certainty adjectives were used in the data analyzed:

1. It is nonetheless clear that this varying use of the terms may reflect the epistemological dispositions of the three disciplines. 
2. One obvious effect of the use of group CPs outside meetings of the group involved is that they identify the identity of the interlocutors to a third party who is present, while at the same time excluding the third party. 
3. These apparent DPs are, therefore, negative in denotation.

The examples above show how explicit devices, mainly adjectives, were employed by the researchers to claim common grounds with readers. As seen from the above sentences, the adjectives clear, obvious and apparent were used to show that their respective claims are generally accepted by the members of the community. Using these adjectives therefore enabled the writers to achieve solidarity with their prospective readers. Aside certainty adjectives, alternative or speculative expressions are used to show solidarity and involvement with readers. Using alternative or speculative expressions, writers show that their prospective readers share the idea behind their claims. The data analyzed indicated that speculative expressions were used by the lecturers as a positive politeness strategy. The example below illustrates the use of alternative expressions as a positive politeness strategy in the data analyzed.

5. To some extent this assumption is true but there are cases of deviation from this assumption. 

In the above example, assumption is used to show solidarity and involvement with the reader. By using assumption, this writer shows that his prospective readers share the idea behind what he was referring to. Therefore, by using assumption, this writer is able to claim common grounds with his prospective readers, thereby, achieving positive politeness.
Further, the study revealed that in addition to the sub-strategy “claiming common views, attitudes, or opinions” these writers also employ the sub-strategy “creating rapport” as a positive politeness strategy in writing their articles. Strategies used to create rapport include imperatives and emotional expressions.

Using imperatives, writers are able to interact with readers in a conversational mode. This makes readers feel closer to the research. Writers use imperatives to instruct readers on how to interpret an argument by requesting them to perform some act or by directing them to another part of the same text (Gil-Salom & Soler-Monreal, 2009). In some cases, writers also use imperatives to instruct readers to perform some act in a different text. It was interesting to observe that imperatives were used in the data analyzed. Some examples of imperatives identified in the data are given below.

5. However, question marks, brackets and commas are peculiar to the Literature compound titles. (See an elaboration of this point in a later section on punctuation usage.)  
6. In their interaction, students utilized four groups of DPs. For a full description of these DPs, please see Afful (2007).  
7. As shown in the above discussion, the extent of variation of the address forms for an interlocutor is greater in spontaneous interactions than in deliberative interactions (see also Afful, 2002).

The examples above demonstrate how imperatives of various forms were used in the analysis and discussion section of the research articles analyzed. In example (5), See an elaboration of this point in a later section on punctuation usage is used to instruct readers to perform some task in a different section of the text. The same can be said about examples (6) and (7), in which examples too, imperatives are used to direct prospective readers to perform a task. The major difference between example (5) on the one hand and example (6) and (7) on the other, however, is that whereas in example (5), readers are instructed to perform the task in the same text, the second group of examples direct readers to perform the task in a different text.

Aside imperatives, emotional expressions are also used to create rapport (Getkham, 2013). To show solidarity with members of the community, writers express emotion towards research findings. The human side of researchers emerges when emphasizing aspects related to the interpretation of unexpected research results. Stance adjectives and adverbs and intensifiers are efficient resources that convey feelings and attitudes (Gil-Salom & Soler-Monreal, 2009). The data analyzed revealed the use of emotional expressions as a way of expressing solidarity. The examples below demonstrate how emotional expressions were used by the lecturers in the analysis and discussions section of their research articles to express positive politeness.

8. Even more interestingly, when examinees answered the same examination prompt, there were noticeable differences in the key terms that were thematized, thus indicating stylistic differences.

9. Equally interesting is the place that “Conference Proceedings” occupies as a source of information for the APES doctoral researchers, given its “respectable” fourth position, following the more “traditional” source types.

Whereas in example (8), the emotional expression Even more interesting was used to create rapport, Equally interesting was used in example (9) to achieve the same goal. Using these emotional expressions, the writers were able to create rapport with their prospective readers, emphasizing solidarity with the readers. Usually, writers tend to use the first person pronouns with reporting verbs to comment on others’ research or to introduce their own studies (Cheng, 2011). By using the first person pronouns, writers decide to take a stance and adopt different roles in the text. Generally, the first person pronoun we can have either inclusive or exclusive semantic reference. While an inclusive we makes reference to the writer and the reader, an exclusive we excludes the reader. The use of inclusive we by writers suggests that readers are considered as colleagues or as fellow researchers and that writers want to reduce the gap between themselves and their readers (Li & Ge, 2009; Harwood, 2005), bringing readers into the text. The use of the inclusive we, therefore, shortens the distance between writers and readers and stresses solidarity with readers (Cheng, 2011). The inclusive pronoun we was identified in the data analysed. The example below shows how the inclusive we was used as a positive politeness strategy in the data analyzed.

10. Thus, in this paper, we have tried to identify and discuss the semantic implications of the following personal pronouns (and their variants) and how they affect the message put across by the doctors: I/me, you/your, it/its/it’s, we/our/us, they/them.

In the example above, the inclusive pronoun we is used to indicate that the writer and readers are cooperators. This writer, by using that pronoun, considers his prospective readers as cooperators, thereby achieving positive politeness with readers. In sum positive politeness strategies are employed by researchers to show solidarity with peer researchers and the scientific community as a whole (Gil-Salom & Soler-Monreal, 2009). To address the positive face needs of readers, article writers employ linguistic units to create common grounds and rapport with their prospective readers.
4.2 Negative Politeness Strategies

Negative politeness strategies are used by writers in order to avoid imposing their views on readers. In the data, negative politeness strategies used include Being tentative by hedging, Showing you do not want to impose and Attributing all responsibility by personalization.

One way by which writers express negative politeness is by being tentative by means of hedging (Getkham, 2013). Writers hedge through the use of modal auxiliaries, modifiers and tentative verbs. Generally, the modal auxiliaries are considered to be the verbs can, could, may, might, must, shall, should, will and would (Biber, 1999). In scientific articles, forms of modality are used as politeness strategies, achieving politeness through mitigations called ‘hedges’ (Salager-Meyer, 1994). Modal auxiliaries are also used to show the author’s attitude towards a text and portray the writer as someone who is reporting his or her own views (Thompson & Yiyun, 1991).

In the Analysis and Discussion section of the research articles analyzed, it was observed that modal auxiliaries are extensively used as a mitigating device to achieve negative politeness. The modal auxiliaries used in the data include can, could, may, might, must, shall, should, will and would. The examples below illustrate how modal auxiliary verbs are used as a negative politeness strategy in the data analyzed.

11. The reason for Chemistry and Literature students’ preference of simple titles may be that it is the familiar pattern to them; it could also be the least taxing way of formulating a title (Afful, 2005).

RALG 19

12. Today, every effort of life could be associated with industrial and commercial activities. RALT 5

13. The contrasting findings may be traced to the different levels of education involved in the two studies: the present study involves undergraduate research and the previous study involves expert writing.

RALG 7

In example (11), may and could are used by the writer to avoid imposing his views on readers whereas in example (12), could is used for the same purpose. Also, may is used in example (13) for the same purpose. Therefore, by using these modal auxiliaries, the writers acknowledge the possibility that they could be proven wrong and the fact that they are only expressing their perspectives about their findings rather than certain truths. Aside modal auxiliary verbs, modifiers are also used to express tentativeness (Getkham, 2013). Modifiers are used to indicate the degree of confidence writers invest in their claims. By using modifiers, writers indicate that their views come from a subjective point of view. Modifiers used to express tentativeness in research articles include probably, possibly, probable possible, likely, presumably, perhaps, among others. The examples below show how modifiers are used to express negative politeness in the data.

14. This probably demonstrates Literature students’ enthusiasm for arousing the interests of potential readers, and engaging them in the reasoning process.

RALG 11

15. Political catch phrases were likely to be actively used among students in an election year and more particularly during the campaigns of the political parties to identify with other party members, garner support from interlocutors perceived to be apolitical and sometimes to provoke.

RALG 13

The examples above show how modifiers are used in the data to achieve negative politeness. In example (13), the modifier probably was used to indicate the degree of confidence the writer invests in the claim. The same can be said about example (14) in which case the modifier likely is used. By using these modifiers, the respective writers avoid imposing their views on their respective readers, thus achieving negative politeness.

Tentative verbs are also used by writers to avoid imposing their findings on readers (Getkham, 2013). Tentative verbs constitute a typical way of expressing possibility. Tentative verbs include verbs such as to indicate, to suggest, to propose, and to suspect. Others are appear, tend and seem. These verbs serve as markers of tentativeness when the writer’s or another author’s findings are described (Ahmad, 2010). The following examples illustrate how tentative verbs are used as a politeness strategy in the data analyzed.

16. Lastly, the use of catch phrases seemed not to be influenced by either age or gender. RALT 15

17. The above names suggest that they could be derived from either the entire names or just the forenames.

RALG 9

18. These songs also suggest that slavery sometimes creates uncertainty and thus imperil both victors and vanquished in the long term.

RALG 15

Wanting not to impose, writers normally dissociate themselves from their reports. Writers dissociate themselves from their findings in three main ways (Getkham, 2013). First, in reporting their findings or other’s findings, writers distance themselves by using impersonal active constructions in which the personal subject is replaced by some non-human entity such as findings, results, and data (Martin-Martin, 2008). In the present study, following Getkham (2016), I refer to this sub-strategy as Impersonal construction 1. The following examples illustrate how reporting verbs are used in impersonal expressions in the data analyzed:

19. The above discussion suggests that the personal address forms represent a significant but complex way through which students maintain, enhance and negotiate relationships on campus in, especially,
nonacademic domains.

20. **The findings suggest** that the introduction may be deemed rhetorically important by two (English and Sociology) of the three disciplines in the present study. RALG 18

21. In spite of the seemingly destructive tendencies of the mice, **the song reveals** a counter predatory metaphor revealed through the image of the cat. RALT 9

In example (17), the expression *The above discussion suggests* which contains the reporting verb suggests is used by the writer to dissociate himself from the claim being made. Also, in example (18), *The findings suggest* is used by the writer to avoid committing himself to the research results. Moreover, in example (19), the expression *the song reveals* is used by the writer to achieve the same effect. By doing so, these writers avoid imposing their findings and claims on readers, thus achieving negative politeness.

Again, writers also dissociate themselves from their reports by using agentless passive structures (**impersonal construction** 2). These passive constructions are used to avoid using a first person pronoun in a way that would be impolite (Amdur, Kirwan & Morris, 2010). By using passive constructions, writers distance themselves from their claim to avoid imposing their views on readers, thereby achieving negative politeness.

22. **The deferential titles that were observed in the present study** involve the following: Papa (‘father’), Egya (‘father’), Nana (‘grandparent’) and Maame (‘mother’). RALG 21

23. **A preliminary analysis was conducted** to obtain some quantitative information concerning the DTs in the present study. RALG 20

In example (19), **The deferential titles that were observed in the present study** is the agentless passive construction used whilst in example (20), **A preliminary analysis was conducted** is the agentless passive structure used. From the above examples, it is clear that these passive structures were used by the writers to dissociate themselves from their claims. By doing so, these writers are able to avoid imposing their findings on their prospective readers, thus achieving negative politeness.

Oftentimes, introductory phrases such as it seems and it is interesting to are used to distance the writer from the findings (Getkam, 2016). In such introductory phrases, the impersonal it is used as a recurrent means of distancing the writer from the process and results of the research under discussion (Gil-Salom & Soler-Monreal, 2009). By using such introductory phrases, writers dissociate themselves from their findings and avoid imposing their claims on readers. The examples below from the data explicate this assertion:

24. From the above DTs, **it is noted that** Literature students used brackets in three senses: in compound titles, in quoting dates and in separating the name of an author from the rest of the DT. RALT 9

25. **It was expected that** English and Sociology students would introduce their essays. RALG 22

In example (21), the expression it is noted that is the impersonal expression used whereas in example (22), *It was expected that* is used. It was expected that is used. Using these expressions, the respective writers are able to distance themselves from their claims, thereby avoiding imposing their claims on readers. This helps them to achieve negative politeness.

Personalization or self-mention is another common negative politeness strategy (Gil-Salom & Soler-Monreal, 2009). By personalization, we refer to the use of first person pronouns and possessive adjectives to present information (Hyland, 2001). Commenting on personalization in writing, Ivanic (1998) mentioned that presenting oneself is at the heart of the writing process and we cannot avoid projecting an impression of ourselves and how we stand in relation to our arguments, discipline and readers. Personalization can serve as a mitigating device when presenting the writer’s findings and activities involved in the research (Gil-Salom & Soler-Monreal, 2009). Personal subjects followed by performative verbs attribute all responsibility for the research procedures and the results to the writer and save the reader’s independence. Personalization is used as a mitigating device in the data analyzed as exemplified below:

26. I present my findings in line with the questions formulated in an earlier section. RALT 3

27. In the section that follows, I discuss animal symbolic representations in the songs in detail. RALT 3

28. In terms of the occurrence of prepositions in a title, **we employ the terms ‘poly-prepositional’, ‘di-prepositional’ and ‘mono-prepositional’ to refer to titles that contain more than two, two and one preposition(s) respectively.** RALT 24

In example (23), and (24) the pronoun *I*, was used by the writer to express his personal stance whereas in example (25), the exclusive pronoun we was used. The effect is to show respect for the reader’s alternative opinion, ensuring the reader’s independence.

**4.3 Frequency of Occurrence of the Politeness Strategies in the Data**

In this section of the Analysis and Discussion of the data, we present in tabular form the use of the various politeness strategies in the data analyzed. The tables provide a graphical presentation of the total number of occurrences of politeness strategies identified in the data analyzed. I first present the frequency of occurrence of positive and negative politeness strategies. This is followed by a discussion on the frequency distribution of positive politeness strategies in the data analysed, paying attention the various sub-strategies under the positive...
politeness strategies. We finally look at the frequency distribution of negative politeness strategies identified in the data, paying particular attention to the various sub-strategies.

Table 1 Frequency of the politeness strategies identified in the texts

<table>
<thead>
<tr>
<th>STRATEGY/SUB-STRATEGY</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showing that writer and reader are cooperators</td>
<td>20</td>
<td>2.97</td>
</tr>
<tr>
<td>Positive politeness Strategies</td>
<td>158</td>
<td>23.44</td>
</tr>
<tr>
<td>Be tentative by Hedging</td>
<td>241</td>
<td>35.76</td>
</tr>
<tr>
<td>Showing that you don’t want to impose</td>
<td>247</td>
<td>36.65</td>
</tr>
<tr>
<td>Attribute all responsibilities by personalization</td>
<td>28</td>
<td>4.15</td>
</tr>
<tr>
<td>Negative Politeness Strategies</td>
<td>516</td>
<td>76.56</td>
</tr>
<tr>
<td>TOTAL</td>
<td>674</td>
<td>100</td>
</tr>
</tbody>
</table>

As indicated in Table 1 above, it is clear that the authors used more negative politeness strategies than positive politeness strategies. Whilst negative politeness strategies recorded 76.56% of the total politeness strategies, positive politeness strategies recorded only 23.44%. It is clear from the table that the difference in the use of the positive and negative politeness strategies is 53.12%. This result indicates a high preference for negative politeness strategies over positive politeness strategies. The fact that these authors prefer negative politeness strategies to positive politeness strategies indicates a preference to mitigate their commitment to propositions (Getkham, 2016). This finding is consistent with Getkham (2014), Gil-Salom and Soler-Monreal (2009), and Myers (1989). The results also confirm Myers (1989) hypothesis that, although a wide range of positive politeness strategies are available for researchers; references to the reader’s positive face needs are highly restricted.

Further, it was discovered that Showing that an author does not want to impose is the most frequently used politeness strategy in the data analyzed. This strategy occurred 247 times in the data analyzed, representing 36.65% of the total politeness strategies used. Next to Showing that an author does not want to impose in terms of frequency of occurrence of the various politeness strategies used in the data is Being tentative by hedging. This strategy had 241 occurrences in the data analyzed, representing 35.76%. The table also indicates that the authors also make frequent use of the strategy Claiming common grounds, a strategy which occurred 138 times in the data, representing 20.47% of the total strategies used. These results are consistent with those of Getkham (2016) which showed similar results.

Less frequently used strategies in the data are Attributing all responsibilities by personalization and Showing that writer and reader are cooperators, recording 28 and 20 occurrences respectively. The finding that the strategy Attributing all responsibility by personalization was more frequently used than the strategy Showing that writer and reader are cooperators in the data analyzed is in contradiction to Getkham’s (2016) study on the use of politeness strategies in the Discussion section of research papers produced by Thai graduate students where the strategy Attributing all responsibility by personalization never occurred. This contrasting finding may be attributed to the different levels of education involved in the two studies: the present study involves experts whereas the previous study involves graduate research students.

Table 1.1 Frequency of the positive politeness strategies identified in the texts

<table>
<thead>
<tr>
<th>STRATEGIES/SUB-STRATEGIES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certainty adjectives</td>
<td>30</td>
<td>18.99%</td>
</tr>
<tr>
<td>Alternative or speculative expressions</td>
<td>3</td>
<td>1.90%</td>
</tr>
<tr>
<td>Claiming common views, attitudes, or opinions</td>
<td>33</td>
<td>20.89</td>
</tr>
<tr>
<td>Rhetorical questions</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Imperatives</td>
<td>47</td>
<td>29.75</td>
</tr>
<tr>
<td>Emotional responses</td>
<td>58</td>
<td>36.71</td>
</tr>
<tr>
<td>Creating rapport</td>
<td>105</td>
<td>66.46</td>
</tr>
<tr>
<td>Claiming common grounds</td>
<td>138</td>
<td>87.35</td>
</tr>
<tr>
<td>The use of the inclusive pronoun we</td>
<td>201</td>
<td>2.66</td>
</tr>
<tr>
<td>Showing that reader and writer are cooperators</td>
<td>20</td>
<td>12.66</td>
</tr>
<tr>
<td>TOTAL</td>
<td>158</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 1.1, the positive politeness strategies used in the data analyzed includes Claiming common grounds and Showing that writer and reader are cooperators. It is evident from the table that the most commonly used positive politeness strategy is Claiming common grounds which recorded 138 occurrences, representing 87.35% of the totality of the positive politeness strategies used. In this strategy, Creating rapport occurred more frequently than Claiming common views, attitudes, or opinions. Whilst Claiming common views, attitudes, or opinions occurred 33 times, representing 20.89%, creating rapport occurred 105 times, representing 66.46%. In creating rapport, these writers use emotional responses, followed by imperatives. They, however, do
not use rhetorical questions. This finding confirms those of Myers (1989), Gil-Salom and Soler-Monreal (2009), and Getkham (2016). Additionally, the writers use certainty adjectives and alternative expressions in claiming common views, attitudes, or opinions.

Regarding the strategy Showing that writer and reader are cooperators, as indicated in Table 1.1, the writers make a minimal use of it. This strategy occurred 20 times only in the data, representing 12.66% of the positive politeness strategies used. This finding is consistent with that of Getkham (2016). This finding also suggests that positive politeness strategies aimed at decreasing the distance between writer and reader may not have been favoured by these writers.

With respect to the frequency of occurrence of the various negative politeness strategies, it became evident from the data analyzed that a number of negative politeness strategies are used in varying degrees. Being tentative by hedging, Showing that the author does not want to impose and Attributing all responsibility by personalization were the negative politeness strategies identified in the data. Table 1.2 thus displays the frequency of each of the negative politeness strategies identified in the data. The results indicate that the strategy Showing that the author does not want to impose was the most frequently used negative politeness strategy, followed by the strategy Being tentative by hedging. The strategy that recorded the least value is the strategy Attributing all responsibility by personalization.

Table 1.2 Frequency of occurrence of the negative politeness strategies identified in the text

<table>
<thead>
<tr>
<th>STRATEGIES/SUB-STRATEGIES</th>
<th>FREQUENCY</th>
<th>PERCENTAGE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modals</td>
<td>128</td>
<td>24.81</td>
</tr>
<tr>
<td>Modifiers</td>
<td>26</td>
<td>5.04</td>
</tr>
<tr>
<td>Tentative verbs</td>
<td>87</td>
<td>16.86</td>
</tr>
<tr>
<td>Being tentative by hedging</td>
<td>241</td>
<td>47.71</td>
</tr>
<tr>
<td>Impersonal construction1</td>
<td>45</td>
<td>8.72</td>
</tr>
<tr>
<td>Passive voice</td>
<td>98</td>
<td>19.00</td>
</tr>
<tr>
<td>Introductory phrase</td>
<td>104</td>
<td>20.12</td>
</tr>
<tr>
<td>Showing that the author does not want to impose</td>
<td>247</td>
<td>47.84</td>
</tr>
<tr>
<td>Attributing all responsibility by personalization</td>
<td>28</td>
<td>5.43</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>516</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

As shown in the above table (Table 1.2), 516 represents the total number of negative politeness strategies identified in the data. The study found that the strategies Being tentative by hedging and Showing that the author does not want to impose are used in almost equal proportions. While the strategy Being tentative by hedging recorded 241 occurrences, representing 47.71% of the negative politeness strategies used, the strategy Showing that the author does not want to impose occurred 247 times in the data, representing 47.84%. The strategy Attributing all responsibility by personalization recorded 28 occurrences in the data, representing 5.43%. This finding resonates with those of Harwood (2005) and Li and Ge (2009). This finding, however, contradicts that of Getkham (2016), in which study the strategy Attributing all responsibility by personalization recorded no occurrence. This difference can be attributed to the fact that Getkham’s (2016) study was conducted on research reports written by students, unlike the present study which focuses on articles written by experts. On the strategy Being tentative by hedging, as expected, modals, modifiers and tentative verbs are used, each recording 128 (24.81%), 26 (5.04%) and 87 (16.86%) occurrences respectively. Taking the discussion further, impersonal construction1, passive voice and introductory phrase are used under the strategy Showing that the author does not want to impose. While impersonal construction 1 recorded 45 (8.72%) occurrences, passive voice and introductory phrase recorded 98 (19.00%) and 104 (20.12%) occurrences respectively. This finding is consistent with previous works such as Falahati (2007), Varttala (1999) and Salager-Meyer (1994).

The discussion on the frequency of occurrence of the various politeness strategies shows that there are relative frequency differences in the use of the various politeness strategies. It can, therefore, be said that the various politeness strategies have different uses and that the authors attach varying degrees of importance to each of these politeness strategies.

5. Conclusion
This study aimed at exploring the use of politeness strategies in the Analysis and Discussion sections of research articles in the field of English Language. The research revealed that both positive and negative politeness strategies are present in the data. The findings indicated that in the Analysis and Discussion section of the research articles analyzed, the reader is actively present in the text. By using positive politeness strategies, the writer seeks to emphasize solidarity and involvement with colleague researchers. Negative politeness strategies also emphasize the independence of the reader (Gil-Salom & Soler-Monreal, 2009). Through this study, it has also become evident that more negative politeness strategies are used as compared to the positive politeness strategies. The findings of the study have significant implications. In the first place, the study adds to the body of
knowledge of politeness in written academic discourse, in general, and research articles, in particular. In addition, the study’s contribution is realized more, especially in Sub-Sahara Africa, in general and Ghana, in particular, where studies on politeness strategies in research articles have been given little attention. With this study, the body of knowledge in academic writing, in general and research articles, in particular, is broadened.

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Lakoff, Robin (1973). The logic of politeness; or minding your p’s and q’s. *Chicago Linguistics Society*, 8, 292–